

AMENDMENTS TO THE CLAIMS:

Please amend claims 1 and 8 and cancel claims 6, 7, 10 to 14 and 16 as set forth below.
The claim listing below replaces all prior versions of the claims in the application.

1. (Currently Amended) An engine exhaust emission purification apparatus comprising:
a reduction catalytic converter disposed in an engine exhaust system to reduce and purify nitrogen oxides by using a liquid reducing agent;

an injection nozzle that supplies by injection the liquid reducing agent to a flow of an exhaust emission upstream from the reduction catalytic converter;

a nozzle temperature detecting device for detecting a nozzle temperature of the injection nozzle;

a temperature maintenance device for maintaining a temperature of at least a part of a liquid reducing agent supply system including the injection nozzle and piping of the injection nozzle at a temperature lower than a boiling point of a solvent of the liquid reducing agent or equal to or higher than a melting point of dissolved matter, wherein the temperature maintenance device is arranged to route a conduit of engine coolant to a flange for attaching the injection nozzle to the exhaust system to thereby cause heat exchange between the flange and the engine coolant;

a coolant temperature detecting device for detecting a coolant temperature of the engine coolant; and

a circulation control device for controlling circulation or interception of the engine coolant in the conduit ~~based on the nozzle temperature detected by the nozzle temperature detecting device,~~

wherein the circulation control device circulates the engine coolant when the detected nozzle temperature is equal to or higher than the boiling point of the solvent of the liquid reducing agent or lower than the melting point of the dissolved matter, and

wherein the circulation control device prohibits a circulative flow of the engine coolant when the detected coolant temperature is equal to or higher than the boiling point of the solvent of the liquid reducing agent.

2. (Previously Presented) The engine exhaust emission purification apparatus according to claim 1, wherein the temperature maintenance device comprises a heat insulating member disposed between the exhaust system and the flange for attaching the injection nozzle to the exhaust system.

3. (Previously Presented) The engine exhaust emission purification apparatus according to claim 1, wherein the temperature maintenance device comprises radiating fins provided to be juxtaposed to the flange for attaching the injection nozzle to the exhaust system.

4 to 7. (Cancelled)

8. (Currently Amended) An engine exhaust emission purification apparatus comprising:
a reduction catalytic converter disposed in an engine exhaust system to reduce and purify nitrogen oxides by using a liquid reducing agent;

an injection nozzle that supplies by injection the liquid reducing agent to a flow of an exhaust emission upstream from the reduction catalytic converter;

a nozzle temperature detecting device for detecting a temperature of the ~~nozzle of the~~ injection nozzle;

a temperature maintenance device for maintaining a temperature of at least a part of a liquid reducing agent supply system including the injection nozzle and piping of the injection nozzle at a temperature lower than a boiling point of a solvent of the liquid reducing agent or equal to or higher than a melting point of dissolved matter, wherein the temperature maintenance device is arranged to lead a conduit for the engine coolant to at least a part of the liquid reducing agent supply system to thereby cause heat exchange between the liquid reducing agent supply system and the engine coolant;

a coolant temperature detecting device for detecting a temperature of the engine coolant;
and

a circulation control device for controlling circulation or interception of the engine coolant in the conduit, ~~based on the temperature of the nozzle detected by the nozzle temperature detecting device~~

wherein the circulation control device circulates the engine coolant when the detected temperature of the injection nozzle is equal to or higher than the boiling point of the solvent of the liquid reducing agent or lower than the melting point of the dissolved matter, and

wherein the circulation control device prohibits circulative flow of the engine coolant when the detected temperature of the engine coolant is equal to or higher than the boiling point of the solvent of the liquid reducing agent.

9 to 16. (Cancelled)

17. (Previously Presented) The engine exhaust emission purification apparatus according to claim 8, wherein the temperature maintenance device comprises a heat insulating member disposed between the exhaust system and the flange for attaching the injection nozzle to the exhaust system.

18. (Previously Presented) The engine exhaust emission purification apparatus according to claim 8, wherein the temperature maintenance device comprises radiating fins provided to be juxtaposed to the flange for attaching the injection nozzle to the exhaust system.